

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028300**Date Inspected:** 21-Aug-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG and Tower**Summary of Items Observed:**

At the start of the shift this Quality Assurance Lead Inspector (QAI) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) Quality Control (QC) personnel. The observations and inspections were performed as noted below:

A). This Quality Assurance Lead Inspector (QALI) assigned the QA Inspectors to the following, but not limited to the work station(s) listed, to observe the welding and the QC inspection of the following:

Joselito Lizardo-OBG W13 Drop-In Panel (Observation of excavations, repair welding, QC inspection and testing of deck splices and K-Plate Extension) and performed QA/VT and MPT verification at various locations as requested by the contractor's QC Department.

Rodney Patterson-OBG E13 Drop-In Panel (Observation of excavations, repair welding, QC inspection and testing of the deck field splices) and performed QA/VT, MPT and UT verification at various locations as requested by the contractor's QC Department.

Fritz Belford-OBG W12 Corner Drop-In Assembly (Observation of welding, QC inspection and testing of floor beams) and performed QA/VT/MPT verification as requested by the contractor's QC Department.

Matt Daggett-OBG E12 (Observation of welding, QC inspection and testing of deck access hole and longitudinal stiffeners) and Bike Path (Observation of stud welding, QC inspection for electrical supports)

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William Clifford-Tower Shear Plates/ESW "Q" (Observation of excavations, repair welding, QC inspection and testing) and performed QA/MPT/UT verification as requested by the contractor's QC Department..

Doug Frey-OBG E12/E13 Corner Drop-In Ass'y (Observation of excavations, repair welding, QC inspection and testing of longitudinal stiffener plate splices), OBG E12 Corner Drop-In Plate Ass'y (Observation of welding, QC inspection and testing of floor beams) and observation of QC/UT of E12/E13 edge plate.

Rob DeArmond- OBG W13 Drop-In Panel (Observation of welding, QC inspection and testing of deck stiffener flanges) and performed QA/UT located at various areas as requested by the contractor's QC Department. Also there was one (1) issue noted during this shift. See Summary of Conversations.

NOTE: See QA daily Weld Inspection Reports (WIR) and NDE reports for additional information and details.

### Quality Assurance Lead Inspector (QALI) Summary

This QA Lead Inspector (QALI) observed the QA Inspector's Joselito Lizardo, William Clifford, Rob DeArmond, Rodney Patterson, Fritz Belford, Doug Frey and Matt Daggett monitor the work performed by the QC inspectors at random intervals and also observed the QA Inspectors verify the welding parameters, the minimum preheat and the maximum interpass temperatures for compliance with the contract specifications. The QAI's utilized a Fluke 337 clamp meter to measure the electrical welding parameters, Tempil Heat Indicators and/or a Fluke 63 IR Thermometer for verifying the preheat and interpass temperatures. At the conclusion of the shift, this QA Lead Inspector discussed and reviewed the work performed by the QAI's in regards to the various observations and the verifications of the WPS's, consumables, welding parameters, preheat and interpass temperatures. The QAI observations of the QC inspection and verification of the welding parameters performed on this date appeared to comply with the contract specifications and there was one (1) issue noted during this shift.

This QA Lead Inspector commence the review of NDT reports, tracking of welding and developing and generating weld maps for W13 drop-in panels, E12 and W12 corner drop-in assemblies. This QA Lead Inspector also received and reviewed the following Request for Weld Repair (RWR) documents RWR 201208-059. This a field draft and is awaiting for approval. Also received the, RWR 201208-057, which is approved. This QALI also received, via e-mail, an updated Repair Tracking Log.

### Summary of Conversations:

There were general conversations with Quality Control Lead Inspector, Bonifacio Daquinag, Jr., at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift.

There were also, other pertinent conversations with QA Supervisor, William Levell, throughout the course of this shift in regards to scheduling of QA personnel, work progress and related structural steel and weld issues. There was one (1) issue noted on this date as described below:

### Issue 1

This QALI also was notified by the QA inspector, Rob DeArmond, that at the weld joint identified as 13W-W2.1, repair will require a contractor's Request for Weld Repair (RWR). In conversation with Mr. DeArmond, he informed this QALI it was noted that an ABF personnel was heating up four (4) areas on the weld in an effort to

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transfer the UT rejects to the B-side of the weld joint. The heat was so intense that it melted the surface of the weld on the A-side of the 20 mm thick deck plate. This QALI contacted the QC Lead inspector, Bonifacio Daquinag, Jr., of this issue. At the conclusion of this discussion, this QALI directed Mr. DeArmond to generate and submit an IR to the QA Task Leader, William Levell, for his review and disposition regarding this issue.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Reyes,Danny	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

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